

# Discussion topics

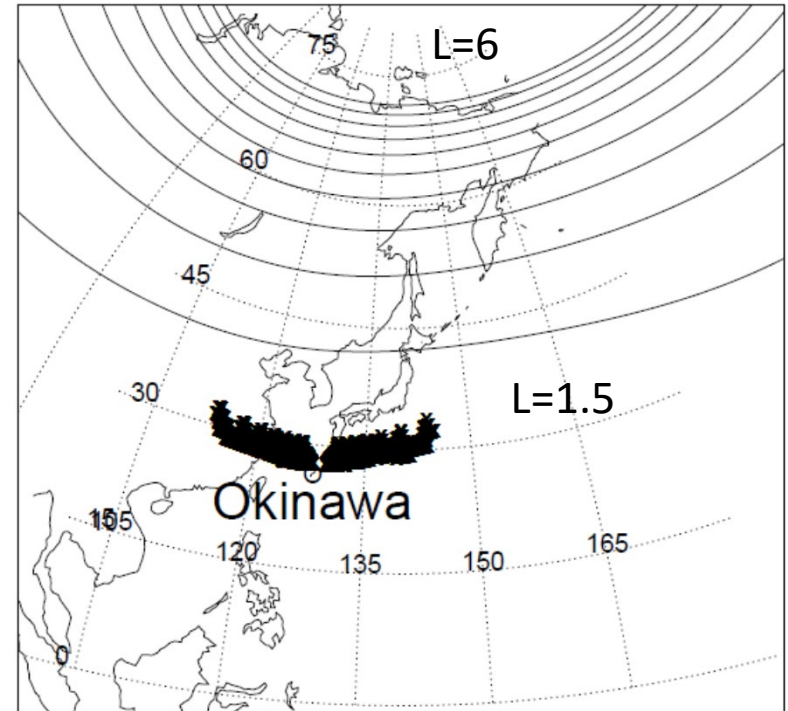
- How to increase SuperDARN activity / publication?
- New SuperDARN radar (e.g., Equatorial / low latitude)?
- Next-year SuperDARN Workshop SD2019 (hosted by NICT, @ Highland Resort Hotel & Spa: near Mt. Fuji, June 02-07)

# How to increase SuperDARN activity / publication?

- Increase the amount of echoes: FITACF 3
- Improve the quality of the SuperDARN data
  - Interferometer observation (elevation angle offset – Tdiff calibration), range offset etc.
- Facilitate the usage of SuperDARN data, even of non-SuperDARN scientists
  - Development of analysis tools (e.g., SPEDAS)
    - Difficult to understand what I am looking at with SuperDARN data (Yamamoto)
  - CDF file creation of convection map data
  - Organize basic courses (including those for other group, other universities) (Sasha)
- Stimulate collaboration with other satellite / ground-based observations, modeling / simulation
- Strengthen the international collaboration (mutual use of data etc.)
- Invite young scientists
- Organize special issue for the SD2019 at a journal with free publication fee (Sasha)
  
- Any good ideas?

# Asian low- and equatorial-latitude HF radar

- 「内容」赤道や低緯度領域に新たに SuperDARNレーダー装置を設置し、電離圏・熱圏・上部中間圏の高時間分解能2次元観測を行い、上記領域に特有な電離圏・熱圏擾乱現象の観測網を確立すると同時に、他の観測装置およびシミュレーションとの協力により磁気圏・電離圏から熱圏・上部中間圏にわたる領域におけるグローバルダイナミクスの解明を目指す。
- 「予算規模」レーダー数により1.2～数億円
- 「関係機関」名古屋大学宇宙地球環境研究所・情報通信研究機構・国立極地研究所・電気通信大学等
- 「時間軸」5-10年後に完成し、その後10年以上にわたる運用を予定



(図は沖縄に設置した場合のエコー分布計算結果、ただし9MHz, 2.5 hopまで)

## 研究ターゲット

- プラズマバブル、LSWS (Large Scale Wave Structure)、TID
- 大規模磁気嵐時の電離圏対流分布
- 赤道・低緯度領域における電離圏対流分布の変動
  - disturbance dynamo, penetration electric field, overshielding, tide, ...

2018/10/16-17

High- and mid-latitude Japanese  
SuperDARN Workshop

-> included in SGPSS future plan document